SANTA CRUZ BIOTECHNOLOGY, INC.

IL-1F9 (Y-12): sc-80056

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

IL-1 (interleukin-1) is a cytokine responsible for initiating a variety of activities through the activation of transcription factors, NFκB and AP-1, thereby promoting host response to injury or infection. The IL-1 superfamily is comprised of several ligands and receptors. IL-1F9, also known as interleukin-1 family member 9 (IL-1εF9), interleukin-1 homolog 1 (IL-1H1) or interleukin-1 ε (IL-1ε), is a secreted ligand belonging to this superfamily. IL-1F9 is highly expressed in skin, stomach, lung and esophagus. IL-1F9 activates the IL-1Rrp2 and IL-1RAcP-dependent pathway leading to NFκB activation. IL-1F5, another member of the IL-1 superfamily, acts as an antagonist, inhibiting the IL-1F9 response. Similar to other family members, IL-1F9 can be regulated by bacterial lipopolysaccharide (LPS). Expression of this protein is stimulated by IFN-γ, TNFα and IL-1β.

REFERENCES

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PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: IL36G (human) mapping to 2q13.

SOURCE

IL-1F9 (Y-12) is a rat monoclonal antibody raised against full length recombinant IL-1F9 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

IL-1F9 (Y-12) is recommended for detection of IL-1F9 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-1F9 siRNA (h): sc-72176, IL-1F9 shRNA Plasmid (h): sc-72176-SH and IL-1F9 shRNA (h) Lentiviral Particles: sc-72176-V.

Molecular Weight of IL-1F9: 20 kDa.

SELECT PRODUCT CITATIONS

1. Eichten, A., Su, J., Adler, A.P., Zhang, L., Ioffe, E., Parveen, A.A., Yancopoulos, G.D., Rudge, J., Lowy, I., Lin, H.C., MacDonald, D., Daly, C., Duan, X. and Thurston, G. 2016. Resistance to anti-VEGF therapy mediated by autocrine IL-6/STAT3 signaling and overcome by IL-6 blockade. Cancer Res. 76: 2327-2339.
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3. Hughes, T.K., Wadsworth, M.H., Gierahn, T.M., Do, T., Weiss, D., Andrade, P.R., Ma, F., de Andrade Silva, B.J., Shao, S., Tsoi, L.C., Ordovas-Montanes, J., Gudjonsson, J.E., Modlin, R.L., Love, J.C. and Shalek, A.K. 2020. Second-strand synthesis-based massively parallel scRNA-seq reveals cellular states and molecular features of human inflammatory skin pathologies. Immunity 53: 878-894.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

RESEARCH USE

For research use only, not for use in diagnostic procedures.